

REMARKS

Upon careful and complete consideration of the Office Action dated February 18, 2009, Applicant has amended the claims which, when considered in conjunction with the comments herein below, are deemed to place the present application in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully solicited.

Claims 1-13 and 16-21 have been amended solely for the purpose of clarifying these claims. Claims 14, 15, and 22 remain cancelled while claims 23-31 have been withdrawn. No new matter has been entered. Accordingly, claims 1-13 and 16-21 are pending.

First, Applicant notes the Examiner's objection to the claims in referring to the arrangement of protective layers with respect to a body (i.e., "remote from a body" and "close to the body", as in claim 1). The Examiner appears to consider these recitations to a body to be referring to parts of a method; additionally, it appears that the Examiner does not consider the body to be limited to the wearer. However, Applicant considers the objections to be remedied by the clarifying amendments of claim 1 wherein it is specified that the protective apron comprises a first protective layer designed to be located farther from a skin layer of a wearer when worn by a wearer, and a second protective layer designed to be located closer to the skin layer of the wearer when worn by the wearer. Support for the foregoing clarification can be found at, for example, page 15, lines 13-15 of the application as filed, which describes the layer having the larger atomic number being on the skin side of the apron. The "skin side" undoubtedly refers to the skin of a wearer when the apron is worn by a wearer.

With respect to the Examiner's objection of the phrase "up to" as also including zero, Applicant has deleted the phrase, thereby restoring the original broader compositional features of the claims. Applicant has done this because of Applicant's conviction that the claims are completely non-obvious, and hence, patentable without this earlier amendment. Applicant

add for the record that the phrase "up to" was previously incorporated in the claims solely in an effort to expedite allowance of the claims, even though Applicant believed the claims without the indicated amendment were patentable on their own merits.

In the Office Action, the Examiner has rejected claims 1, 5-7, 11-13 and 16-21 under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,548,570 to Lange (i.e., "Lange") in view of U.S. Patent No. 4,795,654 to Teleki (i.e., "Teleki"). Specifically, the Examiner relies on Lange for allegedly teaching all of the compositional features of the protective apron, while Teleki is relied upon for allegedly teaching the arrangement of multiple layers of different compositions, i.e., wherein a layer more remote from a body being protected comprises predominantly elements having a lower atomic number than elements contained in a layer closer to the body being protected. However, Applicant steadfastly maintains the arguments presented in the Response of December 18, 2008 wherein Applicant showed that Teleki teaches an opposite arrangement of protective layers as delineated in the instant claims. Specifically, Teleki teaches that the outer protective layer (i.e., one which is first impinged upon by radiation) contains an element of high atomic number while the inner protective layer (i.e., one closer to or in contact with the wearer) contains an element of lower atomic number (see, for example, col. 3, lines 1-60, and Fig. 1 of Teleki). In contrast, the instant claims delineate a radiation protection apron in which the protective layer farther from the body (i.e., farther from the skin layer of a wearer when worn by a wearer) contains elements of lower atomic number than elements contained in the protective layer closer to the body (i.e., closer to the skin layer of a wearer when worn by a wearer). Thus, it can be said that Teleki not only does not teach the claimed invention, but moreover, teaches away from the claimed invention.

Nevertheless, the Examiner continues to reject the claims over Teleki by contending that a radiation protective apron can allegedly be worn in either of two ways, i.e., where a layer intended to be an outer layer is worn as an inner layer, and vice-versa. However, Applicant respectfully disagrees with the Examiner's assertion that radiation protective aprons are generally considered to be worn in either of two orientations. Instead, Applicant brings to the Examiner's attention that radiation protective aprons are generally designed to be worn one way, i.e., have design features which constrain a wearer to wear the protective apron in one way.

For example, Teleki describes a radiation protective apron having a design in which inner and outer layers are specified throughout. The "first layer" in Teleki is the protective layer first impinged by radiation while the "second layer" is closer to the subject wearing the device. See, for example, col. 3, lines 1-60, and Figure 1 therein. Therefore, the Teleki reference itself shows that radiation protective aprons are generally understood to be worn one way, just as a conventional upper garment (e.g., winter coat, sports jacket, and the like) are typically meant to be worn with an inner portion touching the body and an outer portion not touching the body.

For further support of this concept, Applicant refers the Examiner to U.S. Patent No. 4,766,608 to Cusick et al., which depicts in clear detail, particularly by the numerous drawings therein, how a typical radiation protective apron is designed. As shown, Cusick et al. describes a radiation protective apron designed to be worn one way, i.e., having an inner and outer portion. As also evident by Cusick et al., radiation protective aprons typically employ Velcro (hook-and-loop) fasteners which constrain the user to wear the apron one way. In addition, Cusick et al. states in col. 1, lines 14-16 therein regarding the prior art: "the garments normally worn comprise an inner and outer lining..." The latter statement shows that protective aprons of the art are generally known to be worn one way. Furthermore, the focus of the

invention of Cusick et al. was not in designing an apron that could be worn unidirectionally, but in modifying a conventional protective apron to have a better distribution of lead material. Applicant also brings to the Examiner's attention a portion of an online catalog, as attached, showing several common protective aprons, all of which are shown to be worn one way (www.universalmedicalinc.com/radiation-protection/lead-aprons).

Therefore, it has been shown that Teleki teaches away from the claimed invention while Lange does not compensate in any way for the noted deficiencies of Teleki. Accordingly, the claims are not in any way obvious over the combination of Teleki and Lange. Applicant therefore respectfully requests that the rejection of claims 1, 5-7, 11-13 and 16-21 under 35 U.S.C. §103(a) over the combination of Teleki and Lange be withdrawn.

The Examiner has also rejected claims 1-4 under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2004/0262546 to Thiess et al. (i.e., "Thiess et al.") in view of Teleki. Specifically, the Examiner relies on Thiess et al. for allegedly teaching the recited compositional features of claims 1-4 while Teleki is relied upon for allegedly teaching the recited arrangement of layers with respect to the wearer. However, Applicant has already shown above that Teleki not only does not teach the instantly claimed arrangement of protective layers, but moreover, teaches away from the claimed arrangement. Furthermore, Thiess et al. do not compensate in any way for the noted deficiencies of Teleki. Accordingly, claims 1-4 are not in any way obvious over the combination of Thiess et al. and Teleki. Applicant therefore respectfully requests that the rejection of claims 1-4 under 35 U.S.C. §103(a) over the combination of Thiess et al. and Teleki be withdrawn.

The Examiner has also rejected claims 8-10 under 35 U.S.C. §103(a) as being unpatentable over Lange in view of Teleki in further view of U.S. Patent No. 3,883,749 to


Whittaker et al. (i.e., "Whittaker et al."). Specifically, the Examiner relies on the combination of Lange and Teleki for allegedly teaching all of the features of base claim 1, while Whittaker et al. is relied upon for allegedly teaching the particular compositional features recited in claims 8-10. However, Applicant has already shown above that the combination of Lange and Teleki not only does not teach the instantly claimed arrangement of protective layers, but moreover, teaches away from the claimed arrangement. Furthermore, Whittaker et al. do not compensate in any way for the noted deficiencies of Lange and Teleki. Accordingly, claims 8-10 are not in any way obvious over the combination of Lange, Teleki, and Whittaker et al. Applicant therefore respectfully requests that the rejection of claims 8-10 under 35 U.S.C. §103(a) over the combination of Lange, Teleki, and Whittaker et al. be withdrawn.

Applicant also notes the Examiner's inadvertent interpretation of claims 9 and 10, based on the given dependencies recited therein, as an "additionally comprising" feature. In order to prevent such an interpretation, Applicant has amended claims 9 and 10 to depend directly from claim 1 (as in claim 8).

For all the reasons provided, Applicant considers the claims, as amended, to be patentable. Accordingly, allowance of the pending claims is earnestly requested.

If the Examiner has any questions or other concerns regarding this response and amendment, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'LS Szivos', written over a horizontal line.

Leslie S. Szivos, Ph.D.
Registration No. 39,394

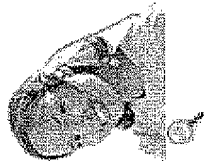
Scully, Scott, Murphy & Presser, P.C.
400 Garden City Plaza, Suite 300
Garden City, New York 11530
(516) 742-4343
Enclosure

EWG/LSS/EG:dk



Home

Call **800.423.2767** M-F, 9-5 EST
Fax **800.535.6229** anytime
Email info@universalmedicalinc.com



Items: 0 Total: \$0.00
[View Cart](#) [Checkout](#)



Login

Contact Us

Keyword Search

Item # Search

[Online Catalog](#) > [Radiation Protection](#) > [Lead Aprons](#)

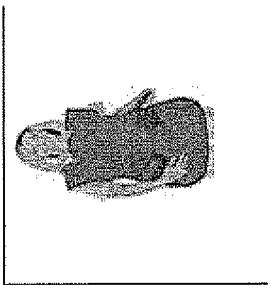
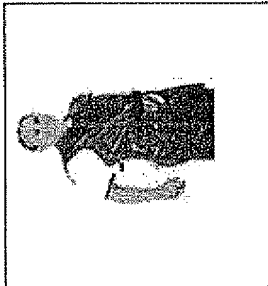
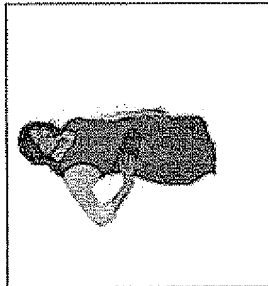
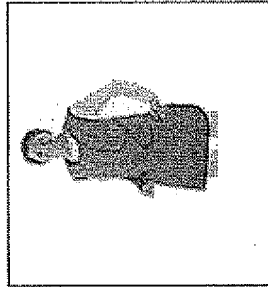
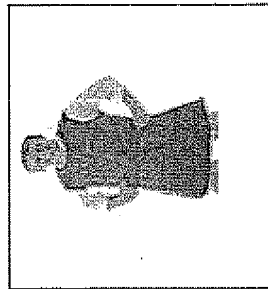
Online Catalog

Anatomical Charts
Anatomical Models
Bariatric Equipment
Clinical Equipment
Diagnostic Imaging
Filing & Storage
Infection Control
Medical Labels
Medical Lighting
MRI Products
Office Products
Operating Room
Patient Positioning
Patient Transfer
Pediatric Equipment
Radiation Protection
Safety
Stretchers
Visual Communication



[Browse by Manufacturer](#)
[Knowledge Base](#)

Our Aprons are Offered in 5 Grades of Lead Choose One!!



Xenolite	Xenolite Non-Lead	Ultra Light	Non-Lead Aprons	Regular Lead
--------------------------	-----------------------------------	-----------------------------	---------------------------------	------------------------------

X-rays provide detailed images of muscles, bones, tissues, and other bodily masses, making it possible to detect fractures, tumors, and other conditions in need of treatment. Although their benefits far outweigh their risks, prolonged exposure to x-rays has been linked to an increased chance of developing various types of cancers. Lead x-ray aprons are often utilized to reduce exposure to both patients and personnel. Wearing radiation protection lead aprons greatly reduces an individual's exposure to radiation. All of our lead aprons meet or exceed recommended lead equivalency and attenuation rates.

At Universal Medical, we offer five lead and non lead variations of xray aprons to shield sensitive tissue and organs from radioactive waves. Available in a wide variety of styles and colors, our radiation aprons can be customized with embroidery of your name, department or facility.

- Our Xenolite radiation protection lead aprons incorporate a 3-element attenuating material. These lead aprons are 30% lighter than regular-grade lead and are recyclable.
- For the lightest weight alternative, try our Xenolite non lead aprons, which use a 2-element attenuating material and are 40% lighter than regular-grade lead. These ergonomically designed lead free aprons are environmentally friendly and can be disposed of after the life of the apron.
- Our ultra light grade radiation xray aprons utilize conventional lead in combination with other attenuating elements. They offer an alternative that is 25% lighter than regular grade lead aprons.

There is no safe amount of radiation, so be sure to protect your staff and your patients with durable, high-quality xray aprons from Universal Medical.

[Contact Us](#) [Request Catalog](#) [Demo Videos](#) [Site Map](#) [Login](#) [Restore Saved Cart](#)

To learn more about Universal Medical's Policies, including Shipping and Handling Fees, click [here](#)

Universal Medical accepts the following credit cards. For more information click [here](#)

